

USING TECHNOLOGY TO STUDY CELLULAR AND MOLECULAR BIOLOGY		
Florida Science Standards - Biology		
Lesson	Standard	Description
3	SC.F.1.4.5	Know that complex interactions among the different kinds of molecules in the cell cause distinct cycles of activity governed by proteins.
3	SC.F.1.4.6	Know that separate parts of the body communicate with each other using electrical and/or chemical signals.
3	SC.F.1.4.7	Know that organisms respond to internal and external stimuli.
3	SC.F.1.4.8	Know that cell behavior can be affected by molecules from other parts of the organism or even from other organisms.
3	SC.G.1.4.3	Know that the chemical elements that make up the molecules of living things are combined and recombined in different ways.
2, 3, 4	SC.H.1.4.1	Know that investigations are conducted to explore new phenomena, to check on previous results, to test how well a theory predicts, and to compare different theories.
2, 3, 4	SC.H.1.4.3	Understand that no matter how well one theory fits observations, a new theory might fit them as well or better, or might fit a wider range of observations, because in science, the testing, revising, and occasional discarding of theories, new and old, never ends and leads to an increasingly better understanding of how things work in the world, but not to absolute truth.
1, 2, 3	SC.H.2.4.2	Know that scientists control conditions in order to obtain evidence, but when that is not possible for practical or ethical reasons, they try to observe a wide range of natural occurrences to discern patterns.
1, 2, 3, 4	SC.H.3.4.2	Know that technological problems often create a demand for new scientific knowledge and that new technologies make it possible for scientists to extend their research in a way that advances science.
1, 2, 3, 4	SC.H.3.4.3	Know that scientists can bring information, insights, and analytical skills to matters of public concern and help people understand the possible causes and effects of events.
1, 2, 3, 4	SC.H.3.4.5	Know that the value of a technology may differ for different people and at different times.
Florida Mathematics Standards – Algebra I		
Lesson	Standard	Description

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1, 2	MA.A.1.4.1	Associate verbal names, written word names, and standard numerals with integers, rational numbers, irrational numbers, and real numbers.
1, 2	MA.A.1.4.4	Understand that numbers can be represented in a variety of equivalent forms, including integers, fractions, decimals, percents, scientific notation, exponents, radicals, and absolute value.
1, 2	MA.A.3.4.1	Understand and explain the effects of addition, subtraction, multiplication, and division on real numbers, including square roots, exponents, and appropriate inverse relationships.
1, 2	MA.A.3.4.3	Add, subtract, multiply, and divide real numbers, including square roots and exponents, using appropriate methods of computing, such as mental mathematics, paper and pencil, and calculator.
1	MA.A.4.4.1	Use estimation strategies in complex situations to predict results and to check the reasonableness of results.
1, 2	MA.B.1.4.3	Relate the concepts of measurement to similarity and proportionality in real-world situations.
1, 2	MA.B.2.4.1	Select and use direct (measured) and indirect (not measured) methods of measurement as appropriate.
1, 2	MA.D.1.4.1	Describe, analyze, and generalize relationships, patterns, and functions using words, symbols, variables, tables, and graphs.
1, 2	MA.E.1.4.1	Interpret data that has been collected, organized, and displayed in charts, tables, and plots.

Florida English Language Arts Standards – English I

Lesson	Standard	Description
3, 4	LA.A.1.4.1	Select and use pre-reading strategies that are appropriate to the text, such as discussion, making predictions, brainstorming, generating questions, and previewing to anticipate content, purpose, and organization of a reading selection.
3, 4	LA.A.1.4.2	Select and use strategies to understand words and text, and to make and confirm inferences from what is read, including interpreting diagrams, graphs, and statistical illustrations.
3, 4	LA.A.1.4.3	Refine vocabulary for interpersonal, academic, and workplace situations, including figurative, idiomatic, and technical meanings.
3, 4	LA.A.2.4.4	Locate, gather, analyze, and evaluate written information for a variety of purposes, including research projects, real-world tasks, and self-improvement.

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3, 4	LA.B.1.4.2	Draft and revise writing that is focused, purposeful, and reflects insight into the writing situation; has an organizational pattern that provides for a logical progression of ideas; has effective use of transitional devices that contribute to a sense of completeness; has support that is substantial, specific, relevant, and concrete; demonstrates a commitment to and involvement with the subject; uses creative writing strategies as appropriate to the purpose of the paper; demonstrates a mature command of language with precision of expression; has varied sentence structure; and has few, if any, convention errors in mechanics, usage, punctuation, and spelling.
3, 4	LA.B.2.4.3	Write fluently for a variety of occasions, audiences, and purposes, making appropriate choices regarding style, tone, level of detail, and organization.
2, 3	LA.B.2.4.4	Select and use a variety of electronic media, such as the Internet, information services, and desktop publishing software programs, to create, revise, retrieve, and verify information.
1, 2, 3, 4	LA.C.1.4.3	Use effective strategies for informal and formal discussions, including listening actively and reflectively, connecting to and building on the ideas of a previous speaker, and respecting the viewpoints of others.
2, 3	LA.C.2.4.1	Determine main concept and supporting details in order to analyze and evaluate non-print media messages.
2, 3, 4	LA.C.3.4.3	Use details, illustrations, analogies, and visual aids to make oral presentations that inform, persuade, or entertain.
1, 2, 3, 4	LA.C.3.4.4	Apply oral communication skills to interviews, group presentations, formal presentations, and impromptu situations.
1, 2, 3, 4	LA.C.3.4.5	Develop and sustain a line of argument and provide appropriate support.
Florida Health Standards – Health I – Life Management Skills		
This supplement does not meet any Florida Health Standards for Health I		